## FOOD PLANT AND HABITS OF SEHIRUS CINCTUS P. B.

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Sehirus cinctus P. B. is one of the prettiest of our American Cydnidae, with its steel-blue back edged with clear white. It is far from rare, once its food plant is known and found. The first time I took this species in any numbers was at Lake Waccabuc, Westchester Co., N. Y., where it was found on a plant of the mint family. At Onteora, near Tannersville in the Catskill Mts., at an elevation of 2400 feet above sea-level. I was able to get a goodly number and to ascertain a food-plant of the species. The first in the locality (and the only one taken that summer) was a single specimen, an adult, on July 25, 1932. The following year, on July 4, I got one by sweeping, as usual; and on July 26 one was caught in flight and two more on a mint growing below my house porch. On the 28th, the mint (which Mr. Wm. T. Davis very kindly determined to be Galeopsis tetrahit, the hemp nettle) sported many of them running about on the upper surface of the leaves. night before they had been seen at about dusk quiescent and one or two head down in the calvees from which the petals had dropped. One of the bugs placed on the palm of my hand proceeded to explore the perspiration-moist surface with its proboscis, but did not attempt to bite. These bugs were kept under observation from then on, and were constantly to be seen on the mint, in varying numbers and always adults, up to August 31. On that date, I saw two adults on the flagged walk in front of the house; and along the edges of the stones where the mints grew, there was an abundance of nymphs crawling about. These seem to be more or less gregarious, as two clumps of some 20 or more were seen, one on the edge of the stone and the other under growth of Clematis. These nymphs appeared to be in several stages, from II to IV or V—at least, the smallest were too large to be just emerged from On September I I again noted a couple of adults of Sehirus walking on the flag-stones and two clusters of numerous nymphs; one, under shrubbery, leaves and small stones, seemed to be made up mostly of 2nd and 3rd instar nymphs; the other, on the bare stone, had larger nymphs as well as the small indiscriminately. The day before, some of the nymphs were noticed head down in the calyces; as already noted, the adults also do this. Do they feed on the seeds? I also saw two or three of the nymphs dragging around seeds. By sunset, all had disappeared. On the

2nd the nymphs were again observed, but no adults were seen. At about II a. m. the nymphs were mostly under cover or on the ground, except for two or three on the walk. On the 3rd and 4th it was rainy, until 2 p. m. on the latter date, with a temperature of 70° F. at about 3 p. m. The Sehiri were naturally conspicuously absent in the rain, both on this day and the day before. Under the shrubbery in one small spot on the flagstones, a few young nymphs were noted in a clump, but by 3 o'clock there were three big clumps on the outer edges of the stones, made up of nymphs in several stages, from mature I up. Some of them had molted to the last nymphal instar. This, when mature, had the usual red abdomen marked with blue and steel-blue head, thorax and wing-pads. The just-transformed nymphs at this stage were light red in the abdomen, the blue parts a pale grey-blue. This applies to nymphs in other instars, except that the latter have no wing-pads. It should be noted that one of these clumps was gathered about what might have been a group of dead stems of the food-plant, just above earth level and single individuals were wandering about on the damp earth. A few of the nymphs were again noted head-down in the dry calyces of the plants. On September 9, the nymphs were in large numbers, as before, a few walking on the flags, but most of them congregated on dead leaves on the surface of the earth or under them on various stems. No first instar nymphs were noted. On the 10th, the nymphs were again observed. They were congregated in clumps at about 9 a. m., and a rough count seemed to indicate that there were some 1500 nymphs in the groups. They were rapidly transforming to the 5th instar, but there were still quite a few in other instars to be seen. At about I p. m., the bulk of them were massed on one of the flags, two and three deep in a pile. A black ant was seen running toward a small group of the nymphs, which it avoided, going around it. In fact, although there were plenty of these ants around, I never saw a Sehirus nymph attacked by one of them. I made no further observation till the 17th of September. The same Sehiri showed up after being hidden most of the preceding day, except for a few that wandered out between showers. There were the habitual big clumps of them, but more of the nymphs were in the last instar and a few had transformed to the adult. It was noticeable that the black ants running about on the pavement gave them a wide berth.

Last summer (1934) the observations could not be continued, as appears from my field notes, briefly sketched hereafter. A little sweeping on July 4 gave one individual at the same spot below the

porch. On July 14, I saw five or six adults wandering about near and on the mint, and also on a stone slab under it, and sometimes on the ground, or else hidden under the side of a pebble. I also looked for eggs and nymphs, but saw none of either. The next day, the *Sehiri* were seen at the same place as the day before, but only one adult on a grass blade, where on the previous day there had been several. From the last mentioned date on, *Sehirus* was to be seen about, up to August 25, but adults only, no nymphs, where the year before they had been literally swarming, even though the hemp nettle was just as abundant as it had been the year before.

Anartia jatrophae L. in Texas.—On the 9th day of November in 1931, A. J. Boyles, Taxidermist to the Witte Museum of San Antonio, Texas, observed some fifteen or twenty white butterflies hovering over a water hole in the Edwards Escarpment, between sun-down and dark. The fact that they were butterflies and flying at this time of day and in a decided flock attracted his attention to such an extent that he collected three specimens. These proved to be one male and two females of Anartia jatrophae, the white peacock. At that time no other record could be found for the occurrence of this butterfly in the State. A very careful search has been made since that time for this insect but without success. On October 21, 1934, two individuals were taken near Sutherland Springs, Wilson County, Texas. These were feeding on Verbesina encelioides Benth. & Hook, and were discovered just about sundown. No other individuals were seen during the afternoon although the entire time was spent in hunting butterflies. On October 28, about ten miles from the former location, fifty of these beautiful black and white butterflies were captured on a small clump of the named plant. They consisted very largely of spent females. A search throughout the surrounding neighborhood did not reveal another butterfly. The time of their greatest activity was in the late afternoon. On October 30 a single worn specimen was captured and no others were found after much searching. Of the specimens captured the condition ranged from newly emerged specimens to individuals who are almost devoid of scales. This leads to the belief that this butterfly is gregarious, that its native habitat must be in the deep shade of the forests in Mexico and southward and that the specimens captured in Texas wander or are driven in by Gulf storms.—H. B. PARKS, San Antonio, Texas.